#### **REMARKS**

## **Double Patenting Rejections**

Because the double patenting rejections cited by the Office Action are provisional rejections, Applicant respectfully requests that the rejections be held in abeyance pending the consideration of the claims with respect to the following remarks. Should the present application be allowed prior to the issuance of any of the provisionally cited, and commonly owned applications, Applicant requests withdrawal of the provisional rejections.

# Claim Rejections - 35 USC § 112

Claims 5, 10, 12 and 16 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated:

In Claim 5 (line 2), Claim 10 (line 7), Claim 12 (line 2) and Claim 16 (line 7), it is not clear as to what "polydimethylvinysiloxane" refers to, because a siloxane unit cannot contain both two methyl substituents and one vinyl substituents.

In Claim 10 (line 2) and Claim 16 (line 2), it is not clear as to how high the "high vinyl silicone gum" is.

With respect Claims 5, 10, 12, and 16, the term polydimethylvinylsiloxane is definite to a person having ordinary skill in the art of Applicant's invention. A chemical structure is enclosed with the present Office Action to demonstrate one example of polydimethylvinylsiloxane for the convenience of the Examiner. In this particular example (i.e. shown on the enclosed chemical structure), the vinyl group is present as a pendant group on each siloxane unit, which clearly demonstrates that two methyl groups and one vinyl group can be attached to a siloxane unit.

With respect to Claims 10 and 16, the term "high vinyl silicone gum" is defined, for example, within the specification of Applicant's originally-filed application at paragraph [0081].

## Claim Rejections - 35 USC § 102

Claims 1-2, 4-5, 8 and 11 were rejected under 35 U.S.C. 102(e) as being anticipated by Sharabura (U.S. Publication No. 2003/0165683). The Examiner stated:

For Claims 1-2, Sharabura discloses a composition comprising a methyl vinyl silicone polymer, a polytetrafluoroethylene, a filler and a crosslinking agent (peroxide). (Table 3) Sharabura is silent on curing the methyl vinyl silicone polymer by addition curing technique. However, the instant claims are product-by-process claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). For Claims 4-5, 8 and 11, Sharabura discloses a composition comprising a methyl vinyl silicone polymer, a polytetrafluoroethylene, a filler and a crosslinking agent (peroxide). (Table 3) Note the preamble "A flexible bakeware compound" in the present invention is merely an intended use, and does not carry any weight of patentability. See MPEP 2111.02.

Applicant has amended Claims 1-2, 4-5, 8 and 11 to claim a *flexible bakeware apparatus* that includes a *basin configured to receive a food substance*. Sharabura teaches a windshield wiper and does not teach each of the elements of the above-mentioned claims. Applicant respectfully requests that the rejection of Claims 1-2, 4-5, 8, and 11 be withdrawn.

Claims 1-2 were rejected under 35 U.S.C. 102(b) as being anticipated by Patel (U.S. Patent No. 5,691,067). The Examiner stated:

Patel discloses a composition comprising a silicone resin, a PTFE, etc. (col. 2, lines 20-33, col. 3, lines 59-65, col. 4, lines 46-51 and Examples). The amount of PTFE is described in col. 4, lines 46-51 and in Coating 10, Coating 18, etc. Patel is silent on curing the silicone resin by addition curing technique. However, the instant claims are product-by-process claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process" In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Note the preamble "A flexible bakeware compound" in the present invention is merely an intended use, and does not carry any weight of patentability. See MPEP 2111.02.

Applicant has amended Claims 1 and 2 to claim a *flexible bakeware apparatus* that includes a *basin configured to receive a food substance*, wherein the basin is formed from a particular mixture. Patel teaches a "powder coating" for cookware and does not teach a mixture from which the basin of an article of bakeware is formed. Accordingly, Applicant respectfully requests that the rejection of Claims 1 and 2 be withdrawn.

#### Claim Rejections – 35 USC § 103

Claims 1-3 were rejected under 35 U.S.C. 103(a) as being unpatentable over Beale (U.S. Publication No. 2003/0047838). The Examiner stated:

Beale teaches the use of a blend of polysiloxane and PTFE for making flexible bakeware. ([0007], [0021], [0029], [0037] and [0042]) Beale is silent on additioncured silicone polymer. However, Beale is silent on curing the blend using addition curing technique. However, the instant claims are product-by-process claims. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the produce in the productby-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior produce was made by a different process" In re Thorpe, 777 F.2d 695, 698, 227 USPO 964, 966 (Fed. Cir. 1985). Furthermore, Beale is silent on the use of the PTFE in a specific amount set forth in the present claims. However, Beale teaches that the polysiloxane is preferably used in an amount of below 70 wt%. However, Beale further teaches that the more the polysiloxane is used, the less expensive the blend will be. ([0029]-[0030]) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize more of polysiloxane such as above 85 wt% (i.e., PTFE in amount of no greater than 15 wt%), if the properties of the blend are still acceptable while keeping the cost down. Especially, Applicants do not show the criticality of the PTFE amount.

Claims 1-3 are not rendered unpatentable over Beale because the reference fails to teach or suggest each of the elements of the claims. Beale teaches a non-stick apparatus that is formed from a blend of fluoropolymer and silicone rubber. The reference states that the blend preferably contains 40% by weight of the fluoropolymer component and 60% by weight of silicone rubber. The reference further states that the silicone rubber content should be below 70%. Taken in

conjunction with the statement that an "apparatus made from 100% PTFE is preferred," it is clear that the lowest amount of PTFE suggested by Beale is 30% by weight.

With respect to Claims 1-3, the claimed compound includes PTFE in a maximum amount of 15 weight percent. This maximum amount of PTFE for Applicant's invention is half of the minimum amount contemplated by Beale. While the Office Action points out the cost savings of reducing the amount of PTFE, Beale clearly teaches away from using lower amounts of PTFE.

Beale teaches that higher amounts of PTFE are preferred and does not contemplate using below 30% by weight of PTFE.

With respect to Claim 2, the claimed compound includes PTFE in an amount of about 6 weight percent. This amount of PTFE is approximately one-fifth the minimum amount contemplated by Beale. While the Office Action points out the cost savings of reducing the amount of PTFE, Beale clearly teaches away from using lower amounts of PTFE. Again, Beale teaches that higher amounts of PTFE are preferred and does not contemplate using below 30% by weight of PTFE.

Applicant's use of lower amounts of PTFE than the values stated in Beale provides significant advantages. Applicant's testing of silicone rubber and PTFE formulations for bakeware has revealed substantial advantages to using PTFE amounts less than or equal to 15 weight percent. Substantially increasing the level of PTFE above 15 weight percent results in poor release characteristics of items baked within the bakeware. Higher levels of PTFE also raise the plasticity of the compound, which makes the compound very difficult if not impossible to mold or otherwise form. Higher levels of PTFE raise the durometer of the compound, which makes the resulting bakeware much less flexible. Finally, PTFE amounts significantly above those claimed by Applicant significantly decrease the "browning" properties of the bakeware.

When PTFE amounts higher than 15% and up to 50% were tested, items baked in the bakeware did not brown uniformly due to "hot spots" caused by the compound.

Applicant respectfully requests that the rejection of Claims 1-3 in view of Beale be withdrawn.

Claims 4-5, 8, 11 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Beale in view of Hompanera (U.S. Patent No. 6,197,359). The Examiner stated:

Beale teaches the use of a blend of polysiloxane and PTFE for making flexible bakeware, supra, which is incorporated herein by reference. Beale further teaches the use of a filler. The amount of the filler is described in [0031]. Beale is silent on the use of methyl vinyl silicone polymer. However, Hompanera teaches the use of a methyl vinyl silicone polymer. However, Hompanera teaches the use of a methyl vinyl polysiloxane for making flexible bakeware. The motivation is to use the methyl vinyl polysiloxane because of its biocompatibility, etc. (col. 3, lines 19-33) In light of which, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use methyl vinyl polysiloxane in Beale's blend. Hompanera further teaches the cure of methyl vinyl polysiloxane by using a platinum catalyst. (col. 3, lines 33-50) Hompanera is silent on the amount of the platinum catalyst. However, the amount of platinum catalyst is a Result-Effective variable. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate a platinum catalyst in whatever amount through routine experimentation in order to achieve a desired cure rate. Especially, Applicants do not show the criticality of the catalyst amount. See MPEP 2144.05 (II).

Claims 4-5, 8, 11, and 12 are not rendered unpatentable because together Beale and Hompanera fail to teach or suggest each of the claim elements. The Office Action cites Beale as teaching the levels of PTFE included in Applicant's claimed invention. However, as submitted previously, Beale teaches much higher amounts of PTFE than those presented in Applicant's claims. Applicant respectfully requests that the rejection of Claims 4-5, 8, 11, and 12 in view of Beale and Hompanera be withdrawn.

Claims 6 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Beale in view of Hompanera and further in review of Togashi (U.S. Patent No. 5,232,959). The Examiner stated:

Beale in view of Hompanera teaches the use of a blend of polysiloxane and PTFE for making flexible bakeware, supra, which is incorporated herein by reference. Beale in view of Hompanera is silent on the specific use of a ground quartz. However, it is well known to incorporate a ground quartz in an addition curing polysiloxane composition. For example, Togashi teaches the use of powdered quartz in an addition curing polysiloxane composition. The motivation of using powdered quartz is to adjust the viscosity, modifying the mechanical properties of the composition, etc. (col. 2, lines 8-39 and col. 6, lines 6-25) In light of the benefit mentioned, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate a ground quartz into Beale's composition.

Claims 6 and 13 are not rendered unpatentable because together Beale, Hompanera, and Togashi fail to teach or suggest each of the claim elements. The Office Action cites Beale as teaching the levels of PTFE included in Applicant's claimed invention. However, as submitted previously, Beale teaches much higher amounts of PTFE than those presented in Applicant's claims. Applicant respectfully requests that the rejection of Claims 6 and 13 in view of Beale, Hompanera, and Togashi be withdrawn.

Claims 7, 9 and 14-15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Beale in view of Hompanera and further in view of Wang (U.S. Patent No. 6,750,279). The Examiner stated:

Beale in view of Hompanera teaches the use of a blend of polysiloxane and PTFE for making flexible bakeware, supra, which is incorporated herein by reference. Hompanera teaches the use of a Pt catalyst. (col. 3, lines 34-50) Hompanera is silent on the specific use of chloro platonic acid. However, it is well known that chloro platonic acid is used as a hydrosilylation catalyst. For example, Wang teaches the use of chloroplatinic (chloroplatanic) acid as a hydrosilylation catalyst. (col. 3, lines 50-60) The motivation of using the chloroplatanic acid is to facilitate the hydrosilylation reaction. In light of the benefit mentioned, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate a chloroplatanic acid into Hompanera's composition. Hompanera is silent on the amount of the chloroplatanic acid. However, the amount of chloroplatanic acid will affect the cure rate. In other words, the amount of the chloroplatanic acid is a Result-Effective variable. Therefore, it would have been obvious to one of ordinary skilled in the art at the time of the invention was made to incorporate the chloroplatanic acid in whatever amount through routine experimentation in order to achieve a desired cure rate. Especially, Applicants do not show the criticality of the chloroplatanic acid amount. See MPEP 2144.05 (II). Hompanera further teaches the use of a silicone hydride. (col. 3, lines 34-50) Hompanera is silent on the specific amount of the

silicone hydride. However, note that the amount of silicone hydride will affect the properties (e.g., tensile, elongation, hardness, etc.) of the resulting cured material by changing the crosslinking density. In other words, the amount of the silicone hydride is a Result-Effective variable. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize silicone hydride in whatever amount through routine experimentation in order to obtain a cured material with desired properties. Especially, Applicants do not show the criticality of the silicone hydride amount. See MPEP 2144.05 (II).

Claims 7, 9 and 14-15 are not rendered unpatentable because together Beale, Hompanera, Wang fail to teach or suggest each of the claim elements. The Office Action cites Beale as teaching the levels of PTFE included in Applicant's claimed invention. However, as submitted previously, Beale teaches much higher amounts of PTFE than those presented in Applicant's claims. Applicant respectfully requests that the rejection of Claims 7, 9 and 14-15 in view of Beale, Hompanera, Wang be withdrawn.

Claims 10 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Beale in view of Hompanera and further in view of Togashi, Wang and Hergenrother (U.S. Patent No. 5,932,649). The Examiner stated:

Beale in view of Hompanera and Wang and Beale in view of Hompanera and Togashi teaches the use of blends of polysiloxane and PTFE for making flexible bakeware, supra, which are incorporated herein by reference. Beale further teaches the use of a pigment. Beale is silent on the amount of the pigment. However, Beales teaches that the pigment amount can affect the non-stick properties of the blend. ([0031]) In other words, the pigment amount is a Result-Effective variable. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to utilize a pigment in whatever amount through routine experimentation in order to obtain a blend with proper non-stick properties. Especially, Applicants do not show the criticality of the pigment amount. See MPEP 2144.05 (II). Beale is silent on the use of ethynl cyclohexanol. However, Wang teaches the use of ethynl cyclohexanol. The motivation to use the ethynl cyclohexanol is to adjust the cure rate. (col. 3, lines 26-49) In light of the benefit mentioned, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate an ethynl cyclohexanol into Beale's blend. Beale is silent on the use of a zinc stearate. However, it is well known that zinc stearate is typically used in a polysiloxane composition. For example, Hergenrother teaches the use of zinc stearate in a polysiloxane composition. The motivation of using zinc stearate is to facilitate processing (i.e., process aid). (col. 9, lines 14-27) In light of the benefit mentioned, it would have been obvious to one of ordinary skill

in the art at the time of the invention was made to incorporate zinc stearate into Beale's blend.

Claims 10 and 16 are not rendered unpatentable because together Beale, Hompanera, Togashi, Wang and Hergenrother fail to teach or suggest each of the claim elements. The Office Action cites Beale as teaching the levels of PTFE included in Applicant's claimed invention. However, as submitted previously, Beale teaches much higher amounts of PTFE than those presented in Applicant's claims. Applicant respectfully requests that the rejection of Claims 10 and 16 in view of Beale, Hompanera, Togashi, Wang and Hergenrother be withdrawn.

### **CONCLUSION**

Applicant respectfully submits that the pending Claims 1-16 are in condition for allowance and such a Notice is respectfully requested. The Examiner is invited to call the undersigned at the below-listed telephone number if, in the opinion of the Examiner, such a telephone conference would expedite or aid the prosecution and examination of this application.

Respectfully submitted,

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